

**Title: STIL 1450.3 Issues and resolutions to Draft-09**

**History:**

- 11/24/03 - Issues carried over from D08
- 11/30/03 - Issues due to changes in 1450.1
- 12/5/03 - Changes per 12/5 phone meeting

Significant issues and changes are listed in the table below. All issues not listed are editorial in nature and appropriate changes have been made in D09. Standard black font is used for resolutions that have been fully addressed and documented. Red italic font is used for resolutions that are still under discussion or have not been included in the document.

**Table 1: Summary of issues resolved in 1450.3-D09**

Ident	Issue	Resolution
DD-1	4/17/03 - Need way to identify X3-mode. i.e., where vectors are consumed in groups of three	4/17/03 - Added a new statement to PatternCharacteristics and Loop Characteristics: VectorModulus. 8/15 - Moved VectorModulus from the LoopCharacteristics block to the InstructionCharacteristics, so that it can apply to all specified instructions. Note that there is also one at the PatternCharacteristics to handle straight vectors. <i>Needs review by Dave Dowding/Agilent (i.e. requestor of this feature)</i>
GM-1	11/21/03 - There's a missing value in the PatternVariables statement of the PatternCharacteristics (clause 17). currently the statement contains  PatternVariables(<Integer   IntegerConstant   SignalVariable   Spec   All>*;  It's missing the value 'No'. It use to have Yes   No, we still need 'No' in there - we want to indicate when the patterns contain no patternvariables....	11/24/03 - Added the additional attribute "No". Also added WFCConstant for completeness. Added the keywords to the descriptions section of the doc. 12/5/03 - approved by wg

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Ident	Issue	Resolution
GR-9	<p>New Undefined Concepts            Several concepts are used without definition (Format, Shape, TimeSet, indirect memory) appealing to intuition and domain knowledge for their meaning. I've seen enough different uses of these terms to fear that they won't be understood consistently.            This problem is deep and widespread.</p>	<p>6/6 - A 5 page glossary has been created (annex A) to address this issue. That said, there is still room for improvement in the syntax definitions.             11/24/2003 - Reference is made from each of the appropriate syntax definition is clause 15.1 to Annex E which contains a detailed example of how timing and wave shapes are handled by this standard.            Annex E has been enhanced with a definition of the key terms as they apply to the generation of waveforms.            12/5/03 - approved by wg</p>
GR-10	<p>Section 5.1 Example            The details in the example seem different from the values used in the introductory paragraph. E.g. MaxSignals 160 when 256 channels was stated.</p>	<p>11/24/03 - Example has been updated for the identified problem and other problems.            12/5/03 - approved by wg</p>
GR-17	<p>CompareEvents and DriveEvents            Can the "long names" (like ForceUp) be used or just the single character variants?</p>	<p>6/6 - Standard allows (and hopefully states) that the long names and short names can be used interchangeably. This is the rule in STIL.0.            11/24/03 - Additional definition to clause 15.1 now states that either the single character or the full name is acceptable.            12/5/03 - Added new identifier "full_name" to make it explicit.            12/5/03 - approved by wg</p>
GR-19	<p>MaxData MaxIO MaxMask etc            I was totally confused by these. The only thing I could imagine is that they are an attempt to define FICM-like architecture details.</p>	<p>6/6 - Yes, this concept is very close to FICM. wg does not want to use the term FICM as it is not commonly understood. However, we will attempt to improve the explanation in 15.1 (see also GR-9).             11/24/03 - Further explanation of this concept was added to Annex E. Reference to Annex E was added at each reference to waveform attributes in clause 15.1.            12/5/03 - approved by wg</p>

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GR-21	ReplicateSubWaveform I didn't understand what might be repeated.	11/24/03 - This statement ties directly to the SubWaveform as defined in STIL.0. The sub-waveform was put in to support architectures like Agilent, or NP-Test sequencer-per-pin. It also support high speed clocks that repeat many times in a cycle. Reference to STIL.0 for the definition of sub-waveforms has been added 12/5/03 - approved by wg
GR-23	Section 16.2 Within Shape, what event does the last (complicated) expression refer to?	11/24/03 - This example is incomplete. There should be an event definition after the last time expression. The example has been corrected 12/5/03 - approved by wg
TT-1	11/24/-03 - All - The statement MaxEvents has been replaced by the equivalent capability in the DriveEvents, CompareEvents statements. Many of the examples still use MaxEvents and need to be adjusted.	11/24/03 - all code examples have been corrected 12/5/03 - approved by wg
TT-2	11/24/03 - Clause 13. This clause has been reviewed as stand-alone by the wg. It needs to be included in the doc.	11/24/03 - added clause 13 to the document. Also the reference to DCResourceCharacteristics from the SignalsCharacteristic block. 12/5/03 - approved by wg
TT-3	11/30/03 - TimeLimits statements need to be changed to the new boolean expressioin syntax using @@.	11/30/03 - Changes made to doc. 12/5/03 - This change is awaiting final approval of expression syntax in STIL.1. <i>Action: needs review and approval of wg</i>
TT-4	11/30/03 - Need to adjust the expression syntax according to the new 1450.1 rules - i.e., remove tics, use := for assignment, etc.	11/30/03 - Changes made to doc. 12/5/03 - This change is awaiting final approval of expression syntax in STIL.1. <i>Action: needs review and approval of wg</i>